

Recovery Plan Action Status

Plan Name: Recovery Plan for *Haplostachys haplostachya* and *Stenogyne angustifolia*

Plan Status: Draft

Plan Date: 20-Sep-93

Lead Agency: USFWS

Lead Office: Pacific Islands Fish And Wildlife Office

(408)

(792-9400)

| Species | Action Priority # | Action # | Action Description | Action Status | Est. Initiation Date | Est. Completion Date | Responsible Parties | Work Type | Labor Type | Action Comments |
|---|-------------------|----------|--|---------------|----------------------|----------------------|---|----------------------------|-----------------------------|-----------------|
| Honohono (Haplostachys haplostachya), No common name (Stenogyne angustifolia var. angustifolia) | 1 | 11 | Negotiate agreements for management of Pohakuloa habitat | Not Started | | | U.S. Fish and Wildlife Service, Ecological Services Division, Division of Forestry and Wildlife, Hawaii Department of Land and Natural Resources, U.S. Army | Work type not yet selected | Labor type not yet selected | |
| Honohono (Haplostachys haplostachya), No common name (Stenogyne angustifolia var. angustifolia) | 1 | 12111 | Choose which sub-populations to fence | Not Started | | | U.S. Fish and Wildlife Service, Ecological Services Division, Division of Forestry and Wildlife, Hawaii Department of Land and Natural Resources, U.S. Army | Work type not yet selected | Labor type not yet selected | |
| Honohono (Haplostachys haplostachya), No common name (Stenogyne angustifolia var. angustifolia) | 1 | 12112 | Construct and maintain fenced enclosures | Not Started | | | U.S. Fish and Wildlife Service, Ecological Services Division, Division of Forestry and Wildlife, Hawaii Department of Land and Natural Resources, U.S. Army | Work type not yet selected | Labor type not yet selected | |
| Honohono (Haplostachys haplostachya), No common name (Stenogyne angustifolia var. angustifolia) | 1 | 1212 | Establish feral ungulate control program | Not Started | | | U.S. Fish and Wildlife Service, Ecological Services Division, Division of Forestry and Wildlife, Hawaii Department of Land and Natural Resources, U.S. Army | Work type not yet selected | Labor type not yet selected | |

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| Honohono (Haplostachys haplostachya), No common name (Stenogyne angustifolia var. angustifolia) | 1 | 1221 | Determine effects of military activities | Not Started | | | U.S. Fish and Wildlife Service, Ecological Services Division, Division of Forestry and Wildlife, Hawaii Department of Land and Natural Resources, U.S. Army | Work type not yet selected | Labor type not yet selected | |
| Honohono (Haplostachys haplostachya), No common name (Stenogyne angustifolia var. angustifolia) | 1 | 1222 | Develop base regulations restricting uses | Not Started | | | U.S. Fish and Wildlife Service, Ecological Services Division, Division of Forestry and Wildlife, Hawaii Department of Land and Natural Resources, U.S. Army | Work type not yet selected | Labor type not yet selected | |
| Honohono (Haplostachys haplostachya), No common name (Stenogyne angustifolia var. angustifolia) | 1 | 1223 | Post signs around exclosures and other sensitive areas | Not Started | | | U.S. Army | Work type not yet selected | Labor type not yet selected | |
| Honohono (Haplostachys haplostachya), No common name (Stenogyne angustifolia var. angustifolia) | 1 | 1231 | Develop fire control plan for PTA habitat areas | Not Started | | | U.S. Fish and Wildlife Service, Ecological Services Division, Division of Forestry and Wildlife, Hawaii Department of Land and Natural Resources, U.S. Army | Work type not yet selected | Labor type not yet selected | |
| Honohono (Haplostachys haplostachya), No common name (Stenogyne angustifolia var. angustifolia) | 1 | 1232 | Implement fire control plan at Pohakuloa | Not Started | | | U.S. Fish and Wildlife Service, Ecological Services Division, Division of Forestry and Wildlife, Hawaii Department of Land and Natural Resources, U.S. Army | Work type not yet selected | Labor type not yet selected | |
| Honohono (Haplostachys haplostachya), No common name (Stenogyne angustifolia var. angustifolia) | 1 | 1241 | Remove alien plants within exclosures | Not Started | | | U.S. Fish and Wildlife Service, Ecological Services Division, Division of Forestry and Wildlife, Hawaii Department of Land and Natural Resources, U.S. Army | Work type not yet selected | Labor type not yet selected | |

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| Honohono (Haplostachys haplostachya), No common name (Stenogyne angustifolia var. angustifolia) | 1 | 1242 | Reduce alien plants outside exclosures | Not Started | | | U.S. Fish and Wildlife Service, Ecological Services Division, Division of Forestry and Wildlife, Hawaii Department of Land and Natural Resources, U.S. Army | Work type not yet selected | Labor type not yet selected | |
| Honohono (Haplostachys haplostachya), No common name (Stenogyne angustifolia var. angustifolia) | 1 | 125 | Control any additional limiting factors, if necessary | Not Started | | | U.S. Fish and Wildlife Service, Ecological Services Division, Division of Forestry and Wildlife, Hawaii Department of Land and Natural Resources, U.S. Army | Work type not yet selected | Labor type not yet selected | |
| Honohono (Haplostachys haplostachya), No common name (Stenogyne angustifolia var. angustifolia) | 1 | 13 | Develop and maintain a monitoring program | Not Started | | | U.S. Fish and Wildlife Service, Ecological Services Division, Division of Forestry and Wildlife, Hawaii Department of Land and Natural Resources, U.S. Army | Work type not yet selected | Labor type not yet selected | |
| Honohono (Haplostachys haplostachya), No common name (Stenogyne angustifolia var. angustifolia) | 2 | 21 | Study reproductive biology, pollinators and germination mechanisms | Not Started | | | U.S. Fish and Wildlife Service, Ecological Services Division, Division of Forestry and Wildlife, Hawaii Department of Land and Natural Resources, U.S. Geological Survey, Biological Resources Division, U.S. Army | Work type not yet selected | Labor type not yet selected | |
| Honohono (Haplostachys haplostachya), No common name (Stenogyne angustifolia var. angustifolia) | 2 | 22 | Assess the effects of introducing birds | Not Started | | | U.S. Fish and Wildlife Service, Ecological Services Division, Division of Forestry and Wildlife, Hawaii Department of Land and Natural Resources, U.S. Geological Survey, Biological Resources Division, U.S. Army | Work type not yet selected | Labor type not yet selected | |

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| Honohono (Haplostachys haplostachya), No common name (Stenogyne angustifolia var. angustifolia) | 2 | 23 | Assess the effects of introduced insects | Not Started | | | U.S. Fish and Wildlife Service, Ecological Services Division, Division of Forestry and Wildlife, Hawaii Department of Land and Natural Resources, U.S. Geological Survey, Biological Resources Division, U.S. Army | Work type not yet selected | Labor type not yet selected | |
| Honohono (Haplostachys haplostachya), No common name (Stenogyne angustifolia var. angustifolia) | 2 | 24 | Assess the effects of disease | Not Started | | | U.S. Fish and Wildlife Service, Ecological Services Division, Division of Forestry and Wildlife, Hawaii Department of Land and Natural Resources, U.S. Geological Survey, Biological Resources Division, U.S. Army | Work type not yet selected | Labor type not yet selected | |
| Honohono (Haplostachys haplostachya), No common name (Stenogyne angustifolia var. angustifolia) | 2 | 311 | Locate extant but as yet undiscovered plants at PTA | Not Started | | | U.S. Fish and Wildlife Service, Ecological Services Division, Division of Forestry and Wildlife, Hawaii Department of Land and Natural Resources, U.S. Army | Work type not yet selected | Labor type not yet selected | |
| Honohono (Haplostachys haplostachya), No common name (Stenogyne angustifolia var. angustifolia) | 2 | 3131 | Survey for both species on Maui | Not Started | | | U.S. Fish and Wildlife Service, Ecological Services Division, Division of Forestry and Wildlife, Hawaii Department of Land and Natural Resources, U.S. Geological Survey, Biological Resources Division | Work type not yet selected | Labor type not yet selected | |

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| Honohono (Haplostachys haplostachya) | 2 | 3132 | Survey for H.haplostachya on Kauai | Not Started | | | U.S. Fish and Wildlife Service, Ecological Services Division, Division of Forestry and Wildlife, Hawaii Department of Land and Natural Resources, U.S. Geological Survey, Biological Resources Division | Work type not yet selected | Labor type not yet selected | |
| Honohono (Haplostachys haplostachya) | 2 | 321 | Determine which new sites should be protected | Not Started | | | U.S. Fish and Wildlife Service, Ecological Services Division, Division of Forestry and Wildlife, Hawaii Department of Land and Natural Resources | Work type not yet selected | Labor type not yet selected | |
| Honohono (Haplostachys haplostachya) | 2 | 322 | Negotiate agreements for management of new sites | Not Started | | | U.S. Fish and Wildlife Service, Ecological Services Division, Division of Forestry and Wildlife, Hawaii Department of Land and Natural Resources | Work type not yet selected | Labor type not yet selected | |
| Honohono (Haplostachys haplostachya) | 2 | 323 | Control threats to new sites, if needed | Not Started | | | U.S. Fish and Wildlife Service, Ecological Services Division, Division of Forestry and Wildlife, Hawaii Department of Land and Natural Resources | Work type not yet selected | Labor type not yet selected | |
| Honohono (Haplostachys haplostachya) | 2 | 331 | Research genetic variability and possible inbreeding | Not Started | | | U.S. Fish and Wildlife Service, Ecological Services Division, Division of Forestry and Wildlife, Hawaii Department of Land and Natural Resources, U.S. Geological Survey, Biological Resources Division, U.S. Army | Work type not yet selected | Labor type not yet selected | |

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| Honohono (Haplostachys haplostachya) | 2 | 332 | Develop propagation techniques | Not Started | | | U.S. Fish and Wildlife Service, Ecological Services Division, National Tropical Botanical Garden, Division of Forestry and Wildlife, Hawaii Department of Land and Natural Resources, U.S. Army | Work type not yet selected | Labor type not yet selected | |
| Honohono (Haplostachys haplostachya) | 2 | 333 | Establish a propagule reservoir | Not Started | | | U.S. Fish and Wildlife Service, Ecological Services Division, National Tropical Botanical Garden, Division of Forestry and Wildlife, Hawaii Department of Land and Natural Resources, U.S. Army | Work type not yet selected | Labor type not yet selected | |
| Honohono (Haplostachys haplostachya) | 2 | 334 | Select genetic stock for augmentation/restoration | Not Started | | | U.S. Fish and Wildlife Service, Ecological Services Division, Division of Forestry and Wildlife, Hawaii Department of Land and Natural Resources, U.S. Geological Survey, Biological Resources Division | Work type not yet selected | Labor type not yet selected | |
| Honohono (Haplostachys haplostachya) | 2 | 335 | Determine appropriate augmentation techniques | Not Started | | | U.S. Fish and Wildlife Service, Ecological Services Division, Division of Forestry and Wildlife, Hawaii Department of Land and Natural Resources, U.S. Geological Survey, Biological Resources Division | Work type not yet selected | Labor type not yet selected | |

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| Honohono (Haplostachys haplostachya) | 2 | 336 | Determine optimal habitat requirements | Not Started | | | U.S. Fish and Wildlife Service, Ecological Services Division, Division of Forestry and Wildlife, Hawaii Department of Land and Natural Resources, U.S. Geological Survey, Biological Resources Division | Work type not yet selected | Labor type not yet selected | |
| Honohono (Haplostachys haplostachya) | 2 | 337 | Select specific areas for augmentation / reestablishment | Not Started | | | U.S. Fish and Wildlife Service, Ecological Services Division, Division of Forestry and Wildlife, Hawaii Department of Land and Natural Resources | Work type not yet selected | Labor type not yet selected | |
| Honohono (Haplostachys haplostachya) | 2 | 34 | Implement augmentation / reestablishment | Not Started | | | U.S. Fish and Wildlife Service, Ecological Services Division, Division of Forestry and Wildlife, Hawaii Department of Land and Natural Resources | Work type not yet selected | Labor type not yet selected | |
| Honohono (Haplostachys haplostachya), No common name (Stenogyne angustifolia var. angustifolia) | 3 | 41 | Determine # of populations needed for long term survival | Not Started | | | U.S. Fish and Wildlife Service, Ecological Services Division, Division of Forestry and Wildlife, Hawaii Department of Land and Natural Resources, U.S. Geological Survey, Biological Resources Division | Work type not yet selected | Labor type not yet selected | |
| Honohono (Haplostachys haplostachya), No common name (Stenogyne angustifolia var. angustifolia) | 3 | 42 | Determine # of individuals needed for long-term survival | Not Started | | | U.S. Fish and Wildlife Service, Ecological Services Division, Division of Forestry and Wildlife, Hawaii Department of Land and Natural Resources, U.S. Geological Survey, Biological Resources Division | Work type not yet selected | Labor type not yet selected | |

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| Honohono (Haplostachys haplostachya), No common name (Stenogyne angustifolia var. angustifolia) | 3 | 43 | Revise recovery objectives | Not Started | | | U.S. Fish and Wildlife Service, Ecological Services Division, Division of Forestry and Wildlife, Hawaii Department of Land and Natural Resources, U.S. Geological Survey, Biological Resources Division | Work type not yet selected | Labor type not yet selected | |